

CLAIMS

1. An oil-impregnated sintered sliding bearing comprising:
an axis;
plural porous sintered compacts joined with each other by sizing;
a cavity provided between the sintered compacts at a center portion of the bearing in a direction of the axis; and
a gap continuously extending from an end portion of the cavity along the axis and having a width narrower than that of the cavity,
wherein the gap has an opening at an end surface of the bearing or a peripheral surface of the bearing.
2. The oil-impregnated sintered sliding bearing according to claim 1,
wherein the gap is at least one recess stripe provided between an outside member of the sintered compacts and an inside member of the sintered compacts, or the gap is composed of recess stripes which are provided between the outside member and the inside member and are gear-shaped in a plan view.
3. The oil-impregnated sintered sliding bearing according to claim 1 or 2,
wherein the bearing further comprises a housing having an inside surface, and the bearing has a spherical surface or a chamfer portion at an edge of the peripheral surface on a side of the opening of the gap, so that an angle between the end surface of the bearing and the inside surface of the housing is 45 degrees or less, or an angle between the peripheral surface of the bearing and the inside

surface of the housing is 45 degrees or less.

4. The oil-impregnated sintered sliding bearing according to claim 1 or 2, wherein the bearing further comprises a housing having an inside surface, and the bearing has an outside diameter which is smaller than an inside diameter of the housing, or the bearing has plural recess stripes provided to an peripheral portion of the bearing so as to extend along the axis, so that another gap is formed between the peripheral surface of the bearing and the inside surface of the housing proximate to the opening of the gap.

5. The oil-impregnated sintered sliding bearing according to one of claims 1 to 4, wherein an inside member of the sintered compacts projects along the axis with respect to an outside member of the sintered compacts on a side of the opening of the gap, so that the bearing has a step formed on the side of the opening.

6. The oil-impregnated sintered sliding bearing according to one of claims 1 to 4, wherein the bearing further comprises a housing having an inside surface, an inside member of the sintered compacts has a flange portion at an end portion thereof on a side of the opening of the gap, and a ring-shaped gap is formed among an end surface of the outside member of the sintered compacts, a lower surface of the flange portion of the inside member, and the inside surface of the housing.

7. The oil-impregnated sintered sliding bearing according to claim 6, wherein the flange portion of the inside member has an outside diameter smaller than an inside diameter of the housing or plural recess stripes are provided on a peripheral portion of the flange portion so as to extend along the axis, so that another gap is formed between a peripheral surface of the flange portion and the inside surface of the housing.

8. The oil-impregnated sintered sliding bearing according to one of claims 1 to 7, wherein the bearing has a chamfer portion at an inside peripheral edge at least on a side of the opening of the gap, and has a tapered shape at an inside peripheral edge of an end portion thereof, so that clearance between an inside peripheral surface of the bearing and a shaft inserted into the bearing at an end portion of a sliding surface is larger than that at a center portion thereof.

9. The oil-impregnated sintered sliding bearing according to one of claims 1 to 8, wherein the bearing has an inside diameter at least at the other end portion opposite to a side of the opening of the gap, the inside diameter being larger than those at portions other than the other end portion, so that clearance between an inside peripheral surface of the bearing and a shaft inserted into the bearing at an end portion of a sliding surface is larger than that at a center portion thereof.

10. The oil-impregnated sintered sliding bearing according to claim 9, wherein the large inside diameter portion of the other end portion is formed by

the outside member of the sintered compacts.

11. The oil-impregnated sintered sliding bearing according to one of claims 1 to 10, wherein an inside member of the sintered compacts has an open porosity or an average pore diameter, which is smaller than that of the outside member.